

Claims

1. A receiving apparatus, characterized by including:

a first receiving means for receiving a signal with a specific frequency which is transmitted from a broadcasting-station apparatus;

a power-supply controlling means for controlling a power supply to the first receiving means; and

a second receiving means for receiving an operation signal which is transmitted from the broadcasting-station apparatus, using a frequency except the specific frequency,

the second receiving means outputting a power-supply control signal to the power-supply controlling means, according to the operation signal, and

the power-supply controlling means controlling a power supply to the first receiving means, according to the power-supply control signal.

2. The receiving apparatus according to claim 1, characterized in that:

if the power supply to the first receiving means is stopped by the power-supply controlling means, the second receiving means receives a start signal which is transmitted from a broadcasting-station apparatus using a frequency except the specific frequency as the operation signal, and according to the start signal, outputs a power-supply instruction signal

as the power-supply control signal to the power-supply controlling means; and

the power-supply controlling means executes a power supply to the first receiving means, according to the power-supply instruction signal.

3. The receiving apparatus according to claim 2, characterized in that:

the receiving apparatus belongs to a group which is predetermined from among a plurality of groups;

the start signal includes group specification information for specifying the group; and

if the second receiving means receives, as the start signal, the group specification information for specifying the group to which the receiving apparatus that includes the second receiving means belongs, then the second receiving means outputs the power-supply instruction signal to the power-supply controlling means.

4. The receiving apparatus according to claim 3, characterized in that:

the start signal includes a plurality of carrier signals which are inserted within a frequency band where the signal with the specific frequency is not yet used; and

the second receiving means has,

a plurality of wave-detecting means for detecting each

carrier signal, and

an extracting means for extracting information which is included in the start signal based on a detection result of the carrier signals by the plurality of wave-detecting means.

5. The receiving apparatus according to claim 4, characterized in that the extracting means outputs the power-supply instruction signal to the power-supply controlling means, if the group specification information coincides with digital data which is made up of the detection result of the carrier signals by the plurality of wave-detecting means.

6. The receiving apparatus according to claim 3, characterized in that:

the start signal includes a plurality of carrier signals which are inserted within a frequency band where the signal with the specific frequency is not yet used; and

the second receiving means has,

a plurality of filter means for allowing the carrier signals to pass through, the filter means being provided for each carrier signal,

a choosing means for choosing and outputting an output of one filter means, one after another, from among the plurality of filter means,

a wave-detecting means for detecting a carrier signal, one after another, from an output of the choosing means, and

an extracting means for extracting information which is included in the start signal based on a detection result of the carrier signals by the wave-detecting means.

7. The receiving apparatus according to claim 3, characterized in that:

the start signal includes a plurality of carrier signals which are inserted within a frequency band where the signal with the specific frequency is not yet used; and

the second receiving means has,

a variable filter means for varying a passing frequency band,

a controlling means for controlling the passing frequency band of the variable filter means, one after another, so that the plurality of carrier signals pass through one after another,

a wave-detecting means for detecting a carrier signal, one after another, from an output of the variable filter means, and

an extracting means for extracting information which is included in the start signal based on a detection result of the carrier signals by the wave-detecting means.

8. The receiving apparatus according to claim 2, characterized in that:

the start signal further includes time information for specifying a time when the first receiving means should be started;

the second receiving means extracts the time information which is included in the start signal that the second receiving means receives, and outputs this time information and the power-supply instruction signal to the power-supply controlling means; and

the power-supply controlling means executes a power supply to the first receiving means, at the time which is specified by the time information.

9. The receiving apparatus according to claim 2, characterized in that:

the first receiving means has,

a tuner section which receives the signal with the specific frequency,

a demodulation section which demodulates a signal that is received by the tuner section,

a conversion section which converts a signal that is demodulated by the demodulation section into a visual signal and an audio signal, and

a control section which controls an operation of the tuner section, the demodulation section and the conversion

section; and

the power-supply controlling means stops the power supply to the tuner section, the demodulation section, the conversion section and the control section, at least until the second receiving means receives the start signal.

10. The receiving apparatus according to claim 2, characterized in that after executing a power supply to the first receiving means according to the power-supply instruction signal, the power-supply controlling means stops a power supply to the second receiving means.

11. The receiving apparatus according to claim 1, characterized in that:

if a power supply to the first receiving means is executed by the power-supply controlling means, the second receiving means receives a stop signal which is transmitted from a broadcasting-station apparatus using a frequency except the specific frequency as the operation signal, and according to the stop signal, outputs a power-supply stop signal as the power-supply control signal to the power-supply controlling means; and

the power-supply controlling means stops the power supply to the first receiving means, according to the power-supply stop signal.

12. A display apparatus, characterized by including a receiving apparatus, and a displaying means for displaying a broadcast image which is received by the receiving apparatus,

the receiving apparatus having:

a first receiving means for receiving a signal with a specific frequency which is transmitted from a broadcasting-station apparatus;

a power-supply controlling means for controlling a power supply to the first receiving means; and

a second receiving means for receiving an operation signal which is transmitted from a broadcasting-station apparatus, using a frequency except the specific frequency,

the second receiving means outputting a power-supply control signal to the power-supply controlling means, according to the operation signal, and

the power-supply controlling means controlling a power supply to the first receiving means, according to the power-supply control signal.

13. The display apparatus according to claim 12, characterized in that:

if the power supply to the first receiving means is stopped by the power-supply controlling means, the second receiving means receives a start signal which is transmitted from a broadcasting-station apparatus using a frequency except the specific frequency as the operation signal, and according

to the start signal, outputs a power-supply instruction signal as the power-supply control signal to the power-supply controlling means; and

the power-supply controlling means executes a power supply to the first receiving means, according to the power-supply instruction signal.

14. A display apparatus, characterized in that the power-supply controlling means stops the power supply to the first receiving means and the displaying means, at least until the second receiving means receives the start signal.

15. A television broadcasting system, which includes a broadcasting-station apparatus that transmits a signal with a specific frequency, and a plurality of receiving apparatus that receive a signal which is transmitted from the broadcasting-station apparatus, characterized in that:

the broadcasting-station apparatus transmits an operation signal to the receiving apparatus, using a frequency except the specific frequency;

the receiving apparatus has,

a first receiving means for receiving the signal with the specific frequency which is transmitted from the broadcasting-station apparatus,

a power-supply controlling means for controlling a power supply to the first receiving means, and

a second receiving means for receiving the operation signal which is transmitted from the broadcasting-station apparatus, using the frequency except the specific frequency;

the second receiving means outputs a power-supply control signal to the power-supply controlling means, according to the operation signal; and

the power-supply controlling means controls a power supply to the first receiving means, according to the power-supply control signal.

16. The television broadcasting system according to claim 15, characterized in that:

if the power supply to the first receiving means is stopped by the power-supply controlling means, the second receiving means receives a start signal which is transmitted from a broadcasting-station apparatus using a frequency except the specific frequency as the operation signal, and according to the start signal, outputs a power-supply instruction signal as the power-supply control signal to the power-supply controlling means; and

the power-supply controlling means executes a power supply to the first receiving means, according to the power-supply instruction signal.